DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023212 Address: 333 Burma Road **Date Inspected:** 01-May-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Liu Hua Jie **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

DCP:

BAY 10

This QA received ZPMC inspection notification sheet 09012 to perform dimensional inspection of traveler rails identified as 3012TR5-001 and 3012TR7-001. Dimensional inspections performed on each of these traveler rails include, but is not limited to, overall length, thickness at typical section, Flange width at typical section, rail sweep, Depth typical section. The results of the inspection were recorded on Caltrans (CT) QA form "OBG DCP Hand Measurements Survey: Traveler Rails and submitted to CT QA lead for review.

WELDING:

Segment 13BE ~ 13CE

WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC qualified welding personnel identified as 067765 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE13-002; located On Orthotropic Box Girder (OBG) Deck Plate to Deck Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2211-B-U2a-FCM-1. See attached photo for further details.

Segment 12CW

This QA Inspector observed ZPMC qualified welding personnel identified as 066479 perform Shielded Metal Arc Welding (SMAW), weld joint identified as RS6001E-001-001; located On Orthotropic Box Girder (OBG) I-Rib to I-Rib CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhu Zhong Hai. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhu Zhong Hai was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-3233-B-U2-FCM-1. See attached photo for further details.

Segment 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 045143 perform Flux Cored Arc Welding (FCAW), weld joint identified as SA3127-001-009; located On Orthotropic Box Girder (OBG) SA3127F to RS 3416 CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Sun Tian Liang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-2231-ESAB.

Segment 13CW

This QA Inspector observed ZPMC qualified welding personnel identified as 066179 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA3016A-127; located On Orthotropic Box Girder (OBG) EP3022A to X449B CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Sun Tian Liang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Sun Tian Liang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-B-U2-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.

WELDING INSPECTION REPORT

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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey - 15000026784, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune, Manoj	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer